WE CLAIM:

1. A method of treating a cardiovascular condition which comprises:

infusing a recombinant adeno-associated virus (AAV) vector into a coronary artery or a coronary sinus for a time and in an amount sufficient to stably and efficiently transduce cardiomyocytes perfused by said artery or said sinus, wherein said AAV vector encodes at least one nucleic acid operably linked to a control region, said nucleic acid encoding a therapeutically-effective molecule; and

expressing said therapeutically-effective molecule in an amount effective to treat or ameliorate said cardiovascular condition.

2. The method of Claim 1, wherein said AAV transduces at least about 10 % of said cardiomyocytes.

3. The method of Claim 1, wherein said AAV transduces at least about 40% of said cardiomyocytes.

4. The method of Claim 1, wherein said AAV transduces at least about 50% of said cardiomyocytes.

5. The method of Claim 1, wherein said AAV is infused for at least about 2 minutes to about 30 minutes.

6. The method of Claim 1, wherein said AAV is infused for at least about 5 minutes to about 20 minutes.

7. The method of Claim 1, wherein said AAV is infused for about 15 minutes.

8. The method of Claim 1, wherein said amount of AAV is about 1 x $10^5$ IU AAV per gram body weight to about 1 x $10^9$ IU AAV per gram body weight.

9. The method of Claim 9, wherein said amount of AAV is about 1 x $10^6$ IU AAV per gram body weight to about 1 x $10^8$ IU AAV per gram body weight.

10. The method of Claim 9, wherein said amount of AAV is about 6 x $10^7$ IU AAV per gram body weight.

11. The method of Claim 1, wherein about 1 x $10^5$ IU AAV per gram body weight to about 1x $10^9$ IU AAV per gram body weight is infused for about 2 to about 30 minutes.

12. The method of Claim 11, wherein about 1 x $10^6$ IU AAV per gram body weight to about 1x $10^8$ IU AAV per gram body weight is infused.

13. The method of Claim 11, wherein about 6 x $10^7$ IU AAV per gram body weight is infused.

14. The method of any one of Claims 11, 12 or 13, wherein said AAV is infused for about 5 to about 20 minutes.

15. The method of any one of Claims 11, 12 or 13, wherein said AAV is infused for about 15 minutes.

16. The method of Claim 11, wherein about 6 x $10^7$ IU AAV per gram body weight is infused for about 15 minutes.

17. The method of Claim 1, wherein said coronary artery is infused *ex vivo or in vivo.*

18. The method of Claim 1, wherein said therapeutically-effective molecule is an anti-sense RNA or a protein.

19. The method of Claim 1 wherein therapeutically-effective molecule is an ion channel gene, a contractile protein, a phospholamban, a β adrenergic receptor, a β adrenergic kinase, a growth factor, an angiogenic factor, a protein or nucleic acid capable of inducing angiogenesis, or a protein or nucleic acid capable of inhibiting angiogenesis.

20. The method of Claim 1, wherein said therapeutically-effective molecule is FGF-1, FGF-2, FGF-5, VEGF, or HIF-1.

21. The method of Claim 1, wherein said therapeutically-effective molecule is thymidine kinase, p21, p27, p53, Rb or NF-κB.

22. The method of Claim 1, wherein said cardiovascular condition is restenosis, atherosclerosis, congestive heart failure, ischemic cardiomyopathy, malignant arrhythmia, myocardial infarction, congestive heart failure, or dilated and hypertrophic cardiomyopathy.

23. The method of Claim 1, wherein treating or ameliorating said cardiovascular condition is for inducing angiogenesis, inhibiting angiogenesis, stimulating or inhibiting cell proliferation, treating restenosis, treating atherosclerosis, treating congestive heart failure, treating ischemic cardiomyopathy or treating malignant arrhythmia.